Application No.: Not Yet Assigned Docket No.: 20260-00079-US

AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior versions, and listings, of claims in the application.

Claim 1 (Currently Amended) Gas-filled spring (1) that operates using gas (13, 14) and is primarily intended for a vehicle, such as a motor cycle (6, 7) or car, in which wherein the gas-filled spring comprises a cylinder (2) and at least one piston (4), which that operates therein and which divides the internal space of the cylinder into a compression chamber and an expansion chamber (return chamber), and in which wherein the gas-filled spring includes an arrangement is designed to ensure maintenance of the necessary quantities of gas and gas pressure settings or differential pressures in the chambers despite any gas leakage occurring, for example including gas leakage between the cylinder and the piston, and/or temperature variations occurring inside and outside the gas-filled spring, characterized in that wherein the arrangement comprises one or more passages (12) which is/are arranged between the chambers and is/are open only in a predetermined or adjustable position (41) of the cylinder and the piston relative to one another, and that wherein, each time the piston passes the said relative predetermined or adjustable position during the movement of the piston in the internal space, the passage(s) thereby opened is/are designed to permit gas transfer (15, 16) between the chambers (8, 9) and/or pressure equalization in or differential pressure adjustment of the gas pressures in the chambers.

Claim 2 (Currently Amended) Gas-filled spring according to Claim 1, characterized in that wherein the position, here called the first position (41), is situated at a relatively short offset distance (A) from the fully expanded position of the gas-filled spring, for example 1 to 50 mm, from the first position.

Claim 3 (Currently Amended) Gas-filled spring according to Claim 2, characterized in that wherein, in the first position, the pressure (P) in the chambers (8, 9) is relatively low, for

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example 1 to 20 bar, compared to the maximum pressure of the chambers occurring in the functioning of the gas-filled spring.

Claim 4 (Currently Amended) Gas-filled spring according to Claim 1, 2-or 3, characterized in that wherein, in a force-stroke curve produced by the gas, gentle curve transitions (34e) are executed preferably throughout the stroke length range.

Claim 5 (Currently Amended) Gas-filled spring according to Claim 1, wherein any one of Claims 1 to 4, characterized in that the expansion chamber or the return chamber (9) is connected to or comprises a non-return valve function (17) forming part of the arrangement and designed to deliver gas (21) to the expansion chamber if the pressure in the expansion chamber is less than the atmospheric pressure or the feed pressure.

Claim 6 (Currently Amended) Gas-filled spring according to Claims Claim 5, characterized in that wherein the non-return valve function (17) connects to the surrounding atmosphere (27) or atmospheric pressure if the gas volume or gas pressure is too low.

Claim 7 (Currently Amended) Gas-filled spring according to Claim 6, characterized in that wherein the non-return valve function (17) connects to a gas volume or gas pressure-boosting element (23), for example a-pump, forming part of the arrangement if the gas volume or gas pressure is too low.

Claim 8 (Currently Amended) Gas-filled spring according to <u>Claim 1</u>, wherein, any one of <u>Claims 1 to 7</u>, characterized in that, in the said open position(s), gas (21) can be discharged via a pressure-relief valve function (28), for example into the surrounding atmosphere (29), should the pressure have risen in one or both of the chambers due to an increase in temperature, for example.

Claim 9 (Currently Amended) Gas-filled spring according to <u>Claim 1</u>, <u>wherein any-one of Claims 1 to 8</u>, characterized in that the arrangement comprises an adjusting element (45), such as

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a manually actuatable adjusting element (46), designed to produce an external adjustment of the

gas volume and/or gas pressure in one or both of the chambers (8, 9).

Claim 10 (Currently Amended) Gas-filled spring according to Claim 1, wherein any-one of

Claims 1 to 9, characterized in that the arrangement is designed to alter the said position

depending on the adjustment, for example a manual adjustment.

Claim 11 (Currently Amended) Valve forming part of a gas-filled spring that operates using gas

and comprises a cylinder (2) and a piston (4), which that operates in the internal space of the

former and which divides the internal space into a compression chamber and an expansion

chamber (8, 9), in which wherein the gas in the chambers is subject to changes in volume and/or

pressure, characterized in that wherein the valve is designed, in a predetermined (41) or set

position of the cylinder and the piston relative to one another, to effect an exceptionally rapid gas

discharge or pressure adjustment which counteracts the said changes.

Claim 12 (Currently Amended) Valve according to Claim 11, characterized in that it wherein the

valve comprises a spring-loaded piston (31), which, as a function of its longitudinal

displacement, keeps a duct for the discharge of gas open or closed, and that the wherein said

piston (31) is arranged with or on diaphragms (36, 37) each designed to seal off a space (28b and

28c respectively) in the valve (28) and to afford the piston a suspension which is on the one hand

laterally rigid and on the other pliable in the longitudinal direction thereof of the piston.

Claim 13 (Currently Amended) Valve according to Claim 11, wherein or 12, characterized in

that the piston in the said duct is provided with a seal (33), for example an O-ring seal, arranged

in a protected position.

Claim 14 (Currently Amended) Valve according to Claim 11, 12 or 13 characterized in that

wherein a spring function (38) producing the spring loading is adjustable or replaceable for

setting of the desired regulating position.

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